TB284 (Rev1) – PLC Communication Fault

The most common cause of this error is that the fiber optic cables are not plugged in correctly to the MPU11 and GPIO4D*. Confirm that the fiber plugged into the gray fiber optic xmitter labeled “1” on the MPU11 is connected to the blue receiver labeled “1” on the GPIO4D and that the fiber optic cable plugged into the blue fiber optic receiver labeled “3” on the MPU11 is connected to the gray xmitter labeled “3” on the GPIO4D.

***For ALLIN1DC systems with this error, it is likely a problem with the ALLIN1DC. Please contact your dealer to arrange repair, replacement or further troubleshooting.**

1. Does the GPIO4D have power? Check the 3.3, 5v, 12V and -12V LED's, if not lit, check for 5V, 12V and -12V input on H6. If voltage is present, but the corresponding LED or the 3.3V LED is not lit, send the GPIO4D in for repair. If no voltage is present, check AC supply (85-264VAC) to the GPIO4D power supply. If AC supply voltage is present but any or all of the 5V, 12V or -12V signals are missing, it's likely a problem with the GPIO4D power supply. Please contact your dealer to arrange repair, replacement or further troubleshooting.

2. Did the LED's on the Jog Panel/Pendant flash on power up? If the LED's did not flash immediately on power up, check the back of the jog board and confirm that the data cable is correctly plugged into the header labeled CPU10. If this cable is plugged in correctly and the LED's did not flash on power up, it is likely that the Jog Panel/Pendant will need to be returned for repair. Please contact your dealer to arrange repair, replacement or further troubleshooting.

3. Are the fiber optic cables transmitting and receiving signals correctly? The Fiber optic cables plugged into the blue fiber optic receivers on both the MPU11 and GPIO4D should have a “bright” red light visible at the end of the fiber if you unplug the fiber optic cable from the blue receiver and look at the end of it. While “bright” is a relative term, if there is any doubt about whether the signal is “bright” or not, there is almost certainly a problem. Confirm that the transmission media (the clear portion) of the fiber optic cable is flush with the plug on the end. While watching the signal, manipulate and flex the cable and observe that the signal doesn't dim or blink while the cable is moved. Now, do the same thing at the receiver at the MPU11. If the signal dims or blinks, it indicates that the fiber optic cable is cracked and the cable will need to be replaced. If there is no signal at all, pull the fiber out of the transmitter (gray receptacle) on the other end and look into the transmitter, if there is a signal coming out of the transmitter, the the fiber optic cable will need to be replaced, if there is no signal coming out of the transmitter, the board with the transmitter will need to be replaced. Please contact your dealer to arrange repair, replacement or further troubleshooting.

4. Is the “PLC Ok” LED on? If the “PLC Ok” LED is off, there is a problem with either the MPU11 or GPIO4D board. Please contact your dealer to arrange repair, replacement or further troubleshooting.

5. Does your MPU11 have the updated crystal installed? MPU11 boards that shipped prior to ##### may need to have the crystal replaced due to a manufacturing defect in the crystal. If your MPU11 is dated prior to ##### (see pic) return it for repair. Please contact your dealer to arrange repair or replacement.